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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/919,045	07/31/2001	Ramesh Nagarajan	15-12	4258
32498	7590	01/29/2008		
CAPITOL PATENT & TRADEMARK LAW FIRM, PLLC P.O. BOX 1995 VIENNA, VA 22183			EXAMINER PHAM, BRENDA H	
			ART UNIT	PAPER NUMBER
			2616	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/919,045

Applicant(s)

NAGARAJAN ET AL.

Examiner

Brenda Pham

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 6-14 is/are rejected.
- 7) ☐ Claim(s) 5 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

1. Claims 1-14 are pending in the application.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4, 6-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki (US 6,289,096 B1) in view of Collon (US 6,256,296 B1).

Regarding claims 1-2, 6, 8-9 and 12 Suzuki discloses a node and a method for use in a node of a network, the method comprising the steps of:

receiving a connection request (step 30 of figure 5); and

assigning a link resource for connecting to a neighboring node by using at least one predefined sequence (see figure 4).

Suzuki does not teach wherein the at least one predefined sequence resulted from a negotiating with the neighboring node prior to receipt of the request. This claim limitation is well known in the art and is also taught by Collon.

Collon teaches, "Routing or switching engine 65 is coupled to a link state database 70, a tentative ("TENT") database 75, a PATHS database 80, and a forwarding database 85. As a router or switch, node 50 exchanges link state packet via its various ports with every other connected node of network 10, and

the link state database 70 stores the link state packets received from all nodes in the network. Each node of network 10 generates its own link state packet that includes information regarding its neighbor nodes including the identity of each neighbor node and the cost associated with reaching each neighbor node. When node 50 has received link state packet from every node of network 10, node 50 will have a complete map of the topology of the network stored in link state database 70. Routing engine 65 may use the information stored in link state database 70 to determine paths between node 50 and any other node of the network” (Col. 4, line 13-55).

It would have been obvious to those having ordinary skill in the art at the time of the invention was made to implement the step of negotiating with the neighboring node prior receipt of the connection request to collecting routing information for calculating the predefined rerouting Sequence.

Suzuki further teaches a transit route is selected from among a plurality of alternate routes when a link is unavailable (Col. 2, line 47-50).

It is well known in the art that when a route is assigned to a connection between nodes, it becomes unavailable for further assignment. Therefore, it would have been obvious to select from among a plurality of alternate routes when a link is unavailable.

Note: Examiner does not give patentable weight to limitation “whereby the assigned link resource is rendered at least temporarily unavailable for further assignment and thereby avoids contention resulting from the request” because the

claimed limitation is a statement of intended use or field of use. Such language that suggests or makes optional but does not require steps to be performed or does not limit a claim to a particular structure does not limit the scope of claim or claim limitation.

Regarding claims 3-4, 7 and 10-11 and 13-14, Suzuki in view of Callon teaches a call routing method using prioritized source-destination routes in a communication network in which nodes are interconnected by links, all possible routes between a source node and a destination node are determined such that each of the routes is formed of at least one of the links. Suzuki does not teach the method is implemented in an optical transport network.

It is well known in the art that when a large network deploys a new architecture, it is highly desirable to reuse the existing node sites and physical routes as much as possible due to the costs of land, equipment and construction. Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to implement the method of Suzuki in an optical transport network.

Allowable Subject Matter

4. Claim 5 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. The following is a statement of reasons for the indication of allowable subject matter: the prior art made of record fails to teach or fairly suggests in combination wherein the negotiation with the neighboring node prior to receipt of the request results in at least two predefined sequences, a first sequence and a second sequence; and

further wherein the assigning step includes; determining if the connection request is a bi-directional request or a unidirectional request;

if a bi-directional request, selecting a first table, the first table comprising link resources arranged in accordance with the first sequence;

if a unidirectional request selecting a second table, the second table comprising link resource arranged in accordance with the second sequence; and

selecting the link resource from the selected table for assignment to the connection request and wherein the link resources comprise wavelengths of the node associated with the link.

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Phelps et al (US 2002/0118636 A1) discloses mesh network protection using dynamic ring.

Spiegel et al *US 5,649,108) discloses combined progressive and source routing control for connection oriented communications networks.

Lu et al (US 2002/0191247 A1) discloses fast restoration in optical mesh network.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brenda Pham whose telephone number is (571) 272-3135. The examiner can normally be reached on Monday-Friday from 9:00 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn D. Feild, can be reached on (571) 272-2092.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-2600.

January 24, 2008
Brenda Pham



**BRENDA PHAM
PRIMARY EXAMINER**